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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/523,179	03/10/2000	Laura Zanibelli	2264-0315-0X	4389

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OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC
FOURTH FLOOR
1755 JEFFERSON DAVIS HIGHWAY
ARLINGTON, VA 22202

EXAMINER

ILDEBRANDO, CHRISTINA A

ART UNIT

PAPER NUMBER

1725

DATE MAILED: 10/31/2002

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/523,179

Applicant(s)

ZANIBELLI ET AL.

Examiner

Christina Ildebrando

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 September 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 41-54, 57-67 and 69-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 57-67 and 69-82 is/are allowed.
- 6) ☒ Claim(s) 41-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/26/02 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 41-46 and 53-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Wu et al.

Wu et al. (US 5,866,744) discloses a catalyst composition useful in hydrocarbon conversion processes. The composition comprises a zeolite such as beta zeolite and at least one metal, including cobalt and molybdenum (column 2, lines 1-5 and column3, lines 50-55). The beta zeolite is in hydrogen form (column 4, lines 55-65). The reference

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specifically teaches that combinations of two metals may be used (column 2, lines 4-5).

The catalyst composition may further contain a binder material, such as alumina or alumina-silica (column 3, lines 50-60). The amounts of materials present appear to meet the instantly claimed amounts. It is taught by the reference that the catalyst composition has a BET surface area in the range of from about 50-1000 m²/g and a pore volume in the range of about 0.1-2 ml/g (column 3, lines 20-30).

As each and every element of the claimed invention is taught in the prior art as recited above, the claims are anticipated by Wu et al.

4. Claims 41-54 are rejected under 35 U.S.C. 102(a) as being anticipated by Kasztelan et al.

Kasztelan et al. (EP 955 093) discloses a catalyst composition useful in hydrocracking processes. The catalyst composition comprises a matrix, a beta zeolite, a hydro-dehydrogenating metal, and a promoter element (Abstract). The beta zeolite may be in hydrogen form (page 3, lines 30-35). Suitable hydro-dehydrogenating metals include metals of group VI and VIII, including cobalt in combination with molybdenum or tungsten (page 4, lines 20-25). With reference to page 3, line 48 – page 4, line 10, the amounts of materials taught by the reference appear to meet the instantly claimed amounts. Refer also to the examples and Table 1 (page 9). Finally, it is taught that the catalyst composition has a specific surface area in the range of 50-600 m²/g and a pore volume in the range of 0.2-1.5 cm³/g (page 6, lines 48-55).

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Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 41-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al.

If it is considered that the Wu et al. reference does not disclose the claimed combination of cobalt with a group VI metal with sufficient specificity to warrant anticipation within the meaning of 102, then a rejection under 103(a) applies. If the prior art does not in fact anticipate the instant claims, then the claims would have been obvious to one of ordinary skill in the art. *Ex parte Lee*, 31 USPQ 2d. 1105.

In this case, the reference teaches a group of metals that places the claimed specie in the possession of the public as in *In re Schaumann*, 197 USPQ 5, and therefore if the reference does not anticipate the claims, said claims would have been obvious to one of ordinary skill in the art. Wu et al. teaches that combinations of metals may be used and specifically teaches the use of cobalt and molybdenum. Therefore, one of ordinary skill would have had reasonable expectation of success from any of the combinations taught by the reference, including those recited in the instant claims.

With regards to claims 47-52, the reference does not disclose specifically how much of each metal is present if a combination of metals is used. However, one of

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ordinary skill would recognize that the amount of catalytic metal is a result effective variable. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the instantly claimed ranges through process optimization, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. See *In re Boesch*, 205 USPQ 215. One would have been motivated to do so in order to obtain the best results from the catalyst.

Allowable Subject Matter

7. Claims 57-67 and 69-82 are allowed. Reasons for Allowance were provided in Paper No. 9.

Response to Arguments

8. Applicant's arguments with respect to claims 41-54 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Ildebrando whose telephone number is (703)


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305-0469. The examiner can normally be reached on Monday-Friday, 7:30-5, with Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (703) 308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

CAI
October 29, 2002


TOM DUNN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700